

### **REMARKS / ARGUMENTS**

The present application includes pending claims 1-36, all of which have been rejected. The Applicant respectfully submits that the claims define patentable subject matter.

Claims 1-36 stand rejected under 35 U.S.C. § 102(b) as being anticipated by US Patent No. 5,465,410, issued to Hiben, et al. (hereinafter, Hiben). The Applicant respectfully traverses these rejections at least based on the following remarks.

#### **I. Examiner's "Response"**

The Examiner states the following in the Final Office Action:

Modifying the signal quality metric is, according to the examiner, the same as changing the signal quality metric. In the cited passage, there is an indication of maximizing the signal quality metric, which is in fact, the same as changing the signal quality metric. In addition, the examiner believes that the signal quality metrics of the Hiben reference are modified from the results of the filter outputs. The examiner can state that the filters can affect or modify how the signal quality metric is generated since the claims do not state a specific method or time period in which the signal quality metric is modified.

See the Final Office Action at page 5. The Applicant respectfully disagrees with the above argument. Initially, the Examiner is reminded that one cannot "modify" a metric unless the metric is "generated" or "determined." In addition, the Applicant points out that Hiben states, in col. 3, lines 60-67, that the filter bank 108

maximizes the signal quality metric of the recovered signal by, obviously, filtering out the adjacent channel interference. The filter bank simply improves the signal quality, i.e., maximizes the signal quality metric, which is being subsequently measured/determined by the quality metric generator in the recoverers 110-114. The Examiner is reminded that in Applicant's claim 1, the **Applicant initially determines the signal quality metric, and after the signal quality metric is determined, the signal quality metric is modified**. Hiben, in comparison, **only determines the signal quality metric (after filtering the signal by the filter bank 108), and then communicates the determined signal quality metric to the encoder 118**. Huben does not disclose any modification of the signal quality metric after it is generated by the recoverers 110-114. Huben also does not disclose any modification of the signal quality metric after it is communicated to the encoder 118.

The Applicant maintains all the arguments stated in the October 1, 2007 response.

## **REJECTION UNDER 35 U.S.C. § 102**

### **II. Hiben Does Not Anticipate Claims 1-36**

The Applicant turns to the rejection of claims 1-36 under 35 U.S.C. 102(b) as being anticipated by Hiben. With regard to the anticipation rejections under 102(b), MPEP 2131 states that "[a] claim is anticipated only if **each and every**

**element** as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." See Manual of Patent Examining Procedure (MPEP) at 2131 (internal citation omitted). Furthermore, "[t]he identical invention must be shown in as complete detail as is contained in the ... claim." See id. (internal citation omitted).

Hiben discloses an FM receiver (100) that includes a plurality of filtering elements (120-124) that have various center frequencies and bandwidths that adjust to maximize the signal quality of a desired signal (104), and recovers the desired signal (104) by inputting the desired signal (104) to each of the plurality of filtering elements (120-124). See Hiben at Abstract.

**A. Rejection of Independent Claims 1, 13, and 25 under 35 U.S.C. § 102 (b)**

With regard to the rejection of independent claim 1 under 35 U.S.C. § 102(b), the Applicant submits that Hiben does not disclose or suggest at least the limitation of "modifying the signal quality metric for each of the plurality of signal paths," as recited by the Applicant in independent claim 1.

The Final Office Action states the following:

Referring to Claim 1, Hiben teaches a method for choosing at least one signal path, the method comprising: Determining a signal quality metric for each of a plurality of signal paths (see col. 2, lines 33-43); Modifying the signal quality metric for each of the plurality of

signal paths (see col. 3, lines 62-67); and Selecting at least one signal path based on the at least one modified signal quality metric (see col. 4, lines 3-8).

See the Final Office Action at page 2. The Examiner is referring for support to the following citation of Hiben:

The smaller bandwidth filter (124) in the filter bank (108) has a center frequency  $f_5$ , equal to  $f_1$ , and a bandwidth  $B_5$ , that is  $Y_5$  Hz smaller than  $B_1$ . This filter maximizes the signal quality metric of the recovered signal when interference is present from both upper and lower adjacent channels. In this case, filters with frequency adjusted higher or lower in frequency from  $f_1$ , or with a bandwidth larger than  $B_1$ , still intercept the adjacent channel interference.

See Hiben at col. 3, lines 60-67. Referring to Figure 1 of Hiben, the Applicant points out that the quality metric generators within the signal recoverers 110-114 determine the quality of the respective signals and send a signal quality metric (137) to the encoder (118). See *id.* at col. 2, lines 30-39. The encoder (118) then identifies a favorably recovered signal, recovered by the recoverers 110-114, based on the signal quality metric. **The encoder (118) does not modify any of the signal quality metrics generated by the signal recoverers 110-114. Instead, the encoder (118) identifies a favorably recovered signal based on a highest signal quality metric.** See *id.* at col. 2, lines 39-47.

Hiben only determines the signal quality metric (after filtering the signal by the filter bank 108), and then communicates the determined signal quality metric to the encoder 118. Hiben does not disclose any modification

**of the signal quality metric after it is generated by the recoverers 110-114. Huben also does not disclose any modification of the signal quality metric after it is communicated to the encoder 118.**

Therefore, the Applicant maintains that Hiben does not disclose or suggest at least the limitation of "modifying the signal quality metric for each of the plurality of signal paths," as recited by the Applicant in independent claim 1.

Accordingly, independent claim 1 is not anticipated by Hiben and is allowable. Independent claims 13 and 25 are similar in many respects to the method disclosed in independent claim 1. Therefore, the Applicant submits that independent claims 13 and 25 are also allowable over the references cited in the Office Action at least for the reasons stated above with regard to claim 1.

**B. Rejection of Dependent Claims 2-12, 14-24, and 26-36**

Based on at least the foregoing, the Applicant believes the rejection of independent claims 1, 13, and 25 under 35 U.S.C. § 102(b) as being anticipated by Hiben has been overcome and request that the rejection be withdrawn. Additionally, claims 2-12, 14-24, and 26-36 depend from independent claims 1, 13, and 25, respectively, and are, consequently, also respectfully submitted to be allowable.

Applicant also reserves the right to argue additional reasons beyond those

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set forth above to support the allowability of claims 1-36.

**CONCLUSION**

Based on at least the foregoing, the Applicant believes that all claims 1-36 are in condition for allowance. If the Examiner disagrees, the Applicant respectfully requests a telephone interview, and request that the Examiner telephone the undersigned Attorney at (312) 775-8176.

The Commissioner is hereby authorized to charge any additional fees or credit any overpayment to the deposit account of McAndrews, Held & Malloy, Ltd., Account No. 13-0017.

A Notice of Allowability is courteously solicited.

Respectfully submitted,

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